

What Works Clearinghouse



February 2012

WWC Quick Review of the Report “School-Based Early Childhood Education and Age-28 Well-Being: Effects by Timing, Dosage, and Subgroups”¹

What is this study about?

The study examined the effect of an early childhood education program on educational attainment by age 28.²

The study analyzed data from 900 individuals who completed the Child-Parent Center Education Program for preschool and kindergarten and 486 individuals from similar backgrounds who completed alternative kindergarten programs through the Chicago Effective Schools Project. Both groups completed kindergarten in 1986.

Educational attainment outcomes were measured using surveys and administrative records. Outcomes studied were highest grade completed, high school completion, on-time high school graduation, any college attendance, attendance at a four-year college, and receipt of a college degree.

Program effects were estimated by comparing the outcomes of individuals who attended the Child-Parent Center Education Program with those of similar individuals who did not. The analysis controlled for the fact that some students attended Child-Parent Centers beyond kindergarten.

Features of the Child-Parent Center Education Program

The Child-Parent Center Education Program provides education and family support services for children ages 3 to 9 (preschool to third grade). It focuses on developing basic skills in language and math using varied instructional formats.

All teachers have bachelor's degrees and are certified in early childhood education.

Classes are small (17 in preschool; 25 in kindergarten to third grade) and offer three hours of instruction five days a week in preschool and either full- or half-day instruction in kindergarten.

The program also features an intensive family outreach component intended to draw in disadvantaged families. Examples of this outreach include parenting education, home visitation, health services, and parent volunteering.

(continued)

¹ Reynolds, A. J., Temple, J. A., Ou, S.-R., Arteaga, I. A., & White, B. A. B. (2011). School-based early childhood education and age-28 well-being: Effects by timing, dosage, and subgroups. *Science Express*. DOI:10.1126/science.1203618.

² The authors also examined outcomes at age 28 related to socioeconomic status, health status and behavior, crime and justice system involvement, and family status. These outcomes fall outside the scope of the quick review protocol and are not covered by this quick review.

Quick reviews examine evidence published in a study (supplemented, if necessary, by information from author queries) to assess whether that study's design meets WWC evidence standards. Quick reviews rely on the effect sizes and significance levels reported by study authors.

The WWC rating applies only to the summarized results, and not necessarily to all results presented in the study.

What did the study find?

The study found positive, statistically significant differences on four outcomes related to educational attainment. Intervention group members completed 0.27 years more schooling, on average, than comparison group members. In addition, intervention group members were more likely to complete high school (82% versus 75%), graduate on time from high school (44% versus 37%), and attend a four-year college than comparison group members (15% versus 11%).

The study did not find statistically significant differences on ever attending college or receipt of a postsecondary degree.

The WWC has reservations about the results because individuals who attended the Child-Parent Center Education Program may have differed from individuals in the comparison group in ways not controlled for in the analysis.

WWC Rating

The research described in this report meets WWC evidence standards with reservations

Strengths: The study’s intervention and comparison groups had similar baseline characteristics, such as parent education and family environment.

Cautions: Although the intervention and comparison groups had similar characteristics, unobserved differences between the groups may have existed. In particular, the types of students who enrolled in Child-Parent Centers, and their families, may have differed from the types that did not in unobserved ways that may have influenced educational attainment.